

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
12 September 2002 (12.09.2002)

PCT

(10) International Publication Number
WO 02/069903 A3

(51) International Patent Classification⁷: A01N 43/04,
A61K 31/70, C07H 1/00, 15/00, 17/00, 19/00, 21/00,
23/00, C07G 11/00, 3/00

(21) International Application Number: PCT/US02/06551

(22) International Filing Date: 6 March 2002 (06.03.2002)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/273,342 6 March 2001 (06.03.2001) US
60/285,698 24 April 2001 (24.04.2001) US
60/331,323 14 November 2001 (14.11.2001) US

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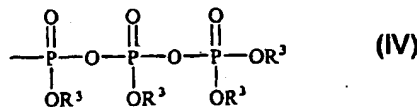
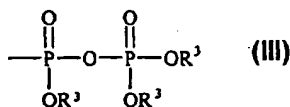
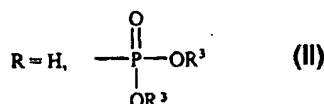
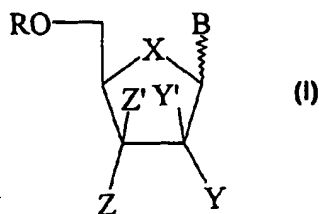
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(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent

[Continued on next page]

(54) Title: NUCLEOSIDES, PREPARATION THEREOF AND USE AS INHIBITORS OF RNA VIRAL POLYMERASES



(57) Abstract: The compounds represented by the formulae (I) wherein X is selected from the group consisting of: O, S, N-R¹, and CHR¹; Y and Y' is individually selected from H, OR¹, NR¹R², and N₃; Z and Z' is individually selected from H, OR¹, and NR¹R²; R = H, formula (II), formula (III), or formula (IV), R¹ and R² is selected from H, alkyl, acyl, aryl which may be substituted or unsubstituted, R³ is selected from H, alkyl, alkenyl, alkynyl, aryl, acyloxyalkyl, and pivaloyloxyalkyl, B is selected from 5- or 6-substituted uracil or cytosine, pseudouracil, N-substituted pseudouracil, 2-thiouracil, 2-thiocytosine, 5- or 6-substituted 2-thiouracil and 2-thiocytosine, 6-azauracil, 5-azacytosine, 8-azapurines, and 7-aza-8-deazapurines. Substitutions may be halosubstituted alkyl, halosubstituted alkenyl, halosubstituted alkynyl, halosubstituted aryl, alkylthio, or NR¹R². When Z and Z' are H and Y or Y' is OH then B is not 5-methyl uracil or cytosine; and pharmaceutically acceptable salts thereof, mono, di or triphosphate and prodrugs thereof.

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(BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,
NE, SN, TD, TG).

(88) Date of publication of the international search report:
27 February 2003

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US02/06551

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : A01N 43/04; A61K 31/70; C07H 1/00, 15/00, 17/00, 19/00, 21/00, 23/00; C07G 11/00, 3/00;

US CL : 514/42, 43, 45, 48, 49, 50, 51; 536/1.11, 4.1, 17.1, 22.1

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 514/42, 43, 45, 48, 49, 50, 51; 536/1.11, 4.1, 17.1, 22.1

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
WEST, REGISTRY

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|---------------|---|---|
| X,P — Y | US 6,348,587 B1 (SCHINAZI et al) 19 February 2002 (19.02-2002), columns 10-12 and 63. <i>US 6,348,587 B1</i> | 1, 4-8, 14-16 22-23 |
| X — Y | US 6,063,628 A (LOEB et al) 16 May 2000 (16.05.2000), column 3, lines 37-67; column 10, lines 13-53. | 1, 4-6, 15-17, 19-20 7-9, 11, 22-23 |
| X — Y | US 5,726,174 A (KIM et al) 10 March 1998 (10.03.1998), column 3, lines 35-67; column 8, lines 19-32; column 9. | 1, 4-6, 14-16, 18, 20 7-8, 10, 12, 22-23 |

☐ Further documents are listed in the continuation of Box C.☐ See patent family annex.

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Date of the actual completion of the international search

14 June 2002 (14.06.2002)

Date of mailing of the international search report

05 SEP 2002

Name and mailing address of the ISA/US

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